

form of the solar corona in passing from minimum to maximum, and back to minimum." Page 294, fig. 70, insert the following legend: "Relative frequency of the occurrence of hydrogen flames as seen on the edge of the northern hemisphere of the sun in a spectroscope; the distribution on the

southern hemisphere is similar to that shown on the northern." Page 294, fig. 71, insert the following legend: "Comparison of the annual changes of the prominences on the sun and the temperatures and pressures on the earth during the years 1872-1900."

THE WEATHER OF THE MONTH.

By Mr. WM. B. STOCKMAN, Chief, Division of Meteorological Records.

PRESSURE.

The distribution of mean atmospheric pressure is graphically shown on Chart VIII and the average values and departures from normal are shown in Tables I and V.

The normal type of mean pressure obtained during the month; the highest, with values slightly greater than 30.00 inches, obtaining over the South Atlantic and east Gulf States; and the lowest, with values of 29.75 inches, obtaining over the western portion of the southern Plateau region.

The mean pressure for the month was above the normal in New England generally, on the coast of North Carolina, in the upper Mississippi Valley, North Dakota, the slope regions, middle Plateau region, eastern-southern Plateau region, and on the Washington coast; elsewhere it was below the normal. As a rule the departures were small, the greatest positive and negative departures amounting to but .06 inch.

The pressure for the month diminished from that of June, 1905, in the Lake region, upper Mississippi Valley generally, in western Oregon, and northwestern California; elsewhere the mean pressure showed an increase over the preceding month. Over the slope and Plateau regions the increase was somewhat marked, the maximum increase amounting to +.15 inch over portions of the northern and middle slope regions. The greatest decrease was over the northern portion of the upper Lake region, and amounted to -.05 inch.

TEMPERATURE OF THE AIR.

The mean temperature for the month was generally below the normal in the region between the Alleghany and Rocky Mountains, and above normal in the remaining districts. The greatest positive departures ranged from +2.0° to +3.8° and occurred over west-central Idaho, Oregon, and eastern and central Washington. The negative departures were more pronounced than the positive, as a rule, and covered a much greater area, ranging from -2.0° to -4.2° over most of the region of negative departure.

The average temperatures for the several geographic districts and the departures from the normal values are shown in the following table:

Average temperatures and departures from normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since January 1.	Average departures since January 1.
		°	°	°	°
New England.....	8	68.5	+ 0.6	- 9.9	-1.4
Middle Atlantic.....	12	74.8	+ 0.5	- 6.6	-0.9
South Atlantic.....	10	79.5	+ 0.3	- 4.6	-0.7
Florida Peninsula*.....	8	81.6	+ 0.2	+ 2.7	+0.4
East Gulf.....	9	79.8	- 1.0	- 8.4	-1.2
West Gulf.....	7	79.7	- 2.2	- 9.6	-1.4
Ohio Valley and Tennessee.....	11	75.7	- 0.7	- 9.6	-1.4
Lower Lake.....	8	71.5	+ 0.3	-11.2	-1.6
Upper Lake.....	10	66.4	- 1.3	- 8.7	-1.2
North Dakota*.....	8	65.9	- 2.4	- 0.7	-0.1
Upper Mississippi Valley.....	11	72.5	- 2.6	-10.4	-1.5
Missouri Valley.....	11	71.7	- 3.4	- 9.2	-1.3
Northern Slope.....	7	67.9	- 1.5	- 3.7	-0.5
Middle Slope.....	6	73.5	- 2.8	- 9.9	-1.4
Southern Slope*.....	6	77.3	- 1.8	-14.3	-2.0
Southern Plateau*.....	13	76.7	- 2.1	- 5.0	-0.7
Middle Plateau*.....	8	70.2	- 0.8	+ 3.6	+0.5
Northern Plateau*.....	12	70.7	+ 2.7	+ 9.9	+1.4
North Pacific.....	7	62.2	+ 0.9	+ 9.8	+1.4
Middle Pacific.....	5	68.0	+ 0.8	+ 7.5	+1.1
South Pacific.....	4	70.4	- 0.3	+ 7.3	+1.0

* Regular Weather Bureau and selected cooperative stations.

By geographical districts the temperature was above the normal in the Atlantic districts, lower Lake region, northern Plateau and north and middle Pacific regions.

Maximum temperatures of 90°, or higher, occurred generally throughout the country, except in portions of the Rocky and Alleghany Mountain regions; of 100 or higher in portions of the following States and Territories: New Jersey, South Carolina, Georgia, Texas, Oklahoma, Indian Territory, Kansas, Colorado, Nebraska, Iowa, South Dakota, New Mexico, Arizona, Nevada, California, Oregon, Washington, and Idaho; of 110°, or higher, in southwestern Arizona, central California, and south-central Washington; and of 120° to 128° in southwestern Arizona and extreme southeastern California.

Freezing temperatures were reported from many Rocky Mountain stations.

In Canada.—Prof. R. F. Stupart says:

The temperature was from 1° to 2° below average in Assiniboia, also in Manitoba, except in the northern portion; average over the Lake Superior district and in the extreme southwestern counties of Ontario, and everywhere else above the average. Interior stations in British Columbia recorded the largest positive departures amounting to 4°. Quebec and the Maritime Provinces gave a positive departure of about 2°, and the larger part of Ontario from 1° to 2°.

PRECIPITATION.

The distribution of total monthly precipitation is shown on Chart III.

The precipitation was below normal in the Pacific and Plateau regions, and portions of the slope regions, central Missouri, Ohio, and upper Mississippi valleys, the east Gulf States, southern New England, east-central New York and New Jersey, and Florida generally; and above normal in the remaining districts. The greatest deficiency did not equal 3.0 inches, while the excess in east-central Maryland, District of Columbia, and the western portions of Virginia and North Carolina ranged from 4.0 to 7.2 inches; 4.0 to 9.6 inches in northwestern Louisiana, western Arkansas, and southwestern Missouri, and 8.0 inches in western South Dakota.

Average precipitation and departure from the normal.

Districts.	Number of stations.	Average.		Departure.	
		Current month.	Percentage of normal.	Current month.	Accumulated since Jan. 1.
		Inches.		Inches.	Inches.
New England.....	8	3.12	86	-0.5	-4.4
Middle Atlantic.....	12	5.77	138	+1.6	-1.6
South Atlantic.....	10	6.53	110	+0.6	-2.4
Florida Peninsula*.....	8	8.10	125	+1.6	+1.5
East Gulf.....	9	4.78	86	-0.8	-0.1
West Gulf.....	7	5.28	171	+2.2	+6.3
Ohio Valley and Tennessee.....	11	3.49	85	-0.6	-3.4
Lower Lake.....	8	3.18	103	+0.1	-1.2
Upper Lake.....	10	3.94	130	+0.9	+0.8
North Dakota*.....	8	4.12	151	+1.4	+1.1
Upper Mississippi Valley.....	11	3.00	79	-0.8	-2.4
Missouri Valley.....	11	4.87	129	+1.1	+1.4
Northern Slope.....	7	2.99	177	+1.3	+3.1
Middle Slope.....	6	4.26	144	+1.3	+4.8
Southern Slope*.....	6	4.30	139	+1.0	+6.8
Southern Plateau*.....	13	0.97	71	-0.4	+5.7
Middle Plateau*.....	8	0.52	84	-0.1	+1.0
Northern Plateau*.....	12	0.44	69	-0.2	-1.1
North Pacific.....	7	0.23	25	-0.7	-7.7
Middle Pacific.....	5	T.	100	0.0	-2.6
South Pacific.....	4	0.05	100	0.0	+3.1

* Regular Weather Bureau and selected cooperative stations.

By geographical districts the precipitation was normal in the middle and south Pacific districts; above normal in the Middle and South Atlantic States, Florida Peninsula, west Gulf States, Lake region, North Dakota, Missouri Valley, and slope regions, and below normal in New England, east Gulf States, Ohio Valley and Tennessee, upper Mississippi Valley, Plateau regions, and north Pacific district.

In Canada.—Professor Stupart says:

The precipitation was much in excess of the average amount in nearly all parts of Ontario, except along the shores of Lake Erie. It was also well above the average in eastern Manitoba, and also in a portion of southwestern Quebec; elsewhere over the large remaining area in the Dominion, the average rainfall was not maintained, if we except a few isolated localities, noticeably Swift Current, with a positive departure of 1.4 inches, and Edmonton and Qu'Appelle, with three-tenths and two-tenths, respectively.

CLEAR SKY AND CLOUDINESS.

The mean monthly cloudiness was normal in North Dakota; below normal in the Gulf States, southern slope region, northern and southern Plateau regions, and northern and middle Pacific coasts; and above normal in New England, Middle and South Atlantic States, Florida Peninsula, Ohio Valley and Tennessee, Lake region, upper Mississippi Valley, Missouri Valley, northern and middle slope, middle Plateau region, and south Pacific coast.

The averages for the various districts, with departures from the normal, are shown in the following table:

Average cloudiness and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	5.3	+ 0.4	Missouri Valley	5.0	+ 0.6
Middle Atlantic	5.7	+ 0.9	Northern Slope	3.9	+ 0.1
South Atlantic	5.4	+ 0.4	Middle Slope	4.9	+ 0.9
Florida Peninsula	5.5	+ 0.5	Southern Slope	3.7	- 0.1
East Gulf	4.9	- 0.1	Southern Plateau	2.3	- 1.0
West Gulf	4.0	- 0.2	Middle Plateau	2.5	+ 0.5
Ohio Valley and Tennessee ..	5.1	+ 0.5	Northern Plateau	2.3	- 0.8
Lower Lake	5.6	+ 1.1	North Pacific	4.3	- 0.1
Upper Lake	5.6	+ 0.9	Middle Pacific	2.5	- 0.4
North Dakota	4.3	0.0	South Pacific	2.9	+ 0.2
Upper Mississippi Valley	5.2	+ 0.9			

The distribution of clear sky is graphically shown on Chart IV, and the numerical values of average daylight cloudiness,

both for individual stations and by geographic districts, appear in Table I.

HUMIDITY.

The mean monthly relative humidity was normal in the following geographic districts: South Atlantic States, southern Plateau region, and north Pacific coast; below normal in New England, Florida Peninsula, northern Plateau region, and middle Pacific coast; and above normal in the Middle Atlantic and Gulf States, Ohio Valley and Tennessee, Lake region, North Dakota, upper Mississippi Valley, Missouri Valley, slope regions, middle Plateau, and south Pacific coast.

The averages by districts appear in the following table:

Average relative humidity and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	79	- 1	Missouri Valley	72	+ 6
Middle Atlantic	78	+ 4	Northern Slope	62	+ 10
South Atlantic	80	0	Middle Slope	66	+ 8
Florida Peninsula	78	- 2	Southern Slope	64	+ 5
East Gulf	80	+ 2	Southern Plateau	38	0
West Gulf	79	+ 5	Middle Plateau	36	+ 4
Ohio Valley and Tennessee ..	74	+ 5	Northern Plateau	39	- 2
Lower Lake	75	+ 6	North Pacific	75	0
Upper Lake	77	+ 5	Middle Pacific	61	- 2
North Dakota	74	+ 8	South Pacific	67	+ 3
Upper Mississippi Valley	76	+ 8			

WIND.

The maximum wind velocity at each Weather Bureau station for a period of five minutes is given in Table I, which also gives the altitude of Weather Bureau anemometers above ground.

Following are the velocities of 50 miles and over per hour registered during the month:

Maximum wind velocities.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
Abilene, Tex.	7	58	e.	Mount Tamalpais, Cal. ...	9	50	nw.
Bismarck, N. Dak.	16	52	w.	Do.	12	54	nw.
Hatteras, N. C.	20	58	nw.	Omaha, Nebr.	13	64	ne.
Mount Tamalpais, Cal. ..	8	58	nw.				

DESCRIPTION OF TABLES AND CHARTS.

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For description of tables and charts see page 20 of REVIEW for January, 1905.